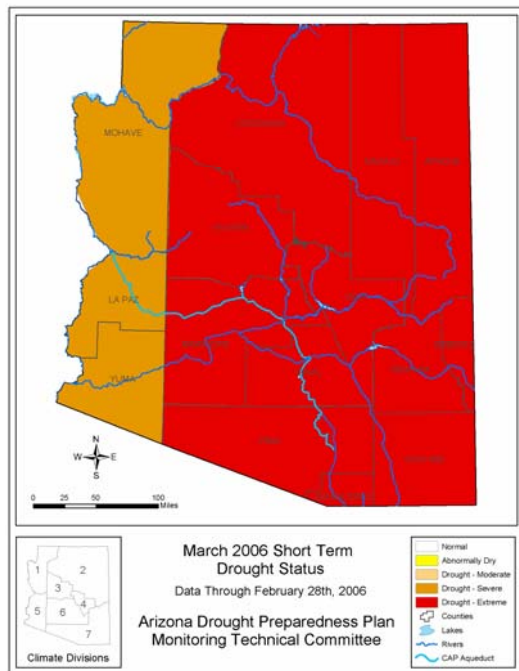


March Drought Monitor Report



Produced by the Monitoring Technical Committee

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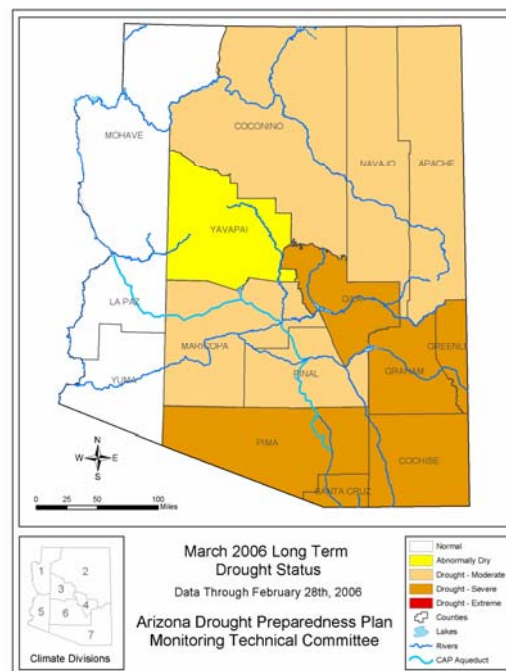
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Arizona's short-term drought status is now extreme in the majority of the state. Severe drought conditions exist in the north- and southwest regions.

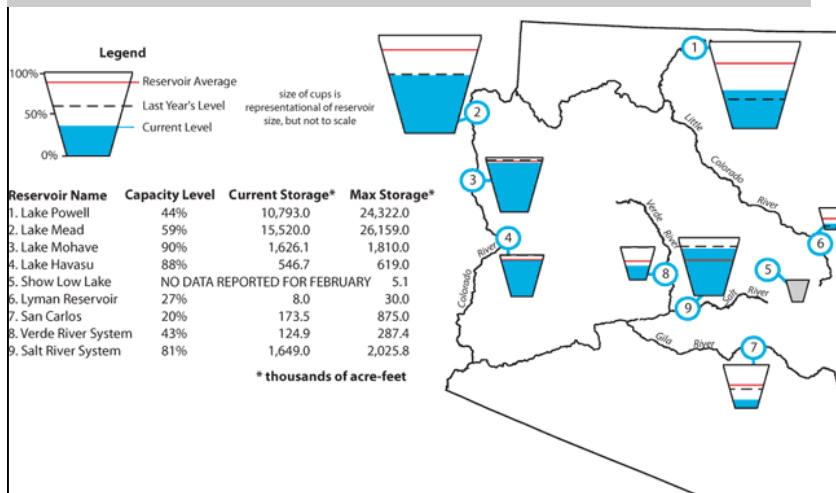
Drought Decision Triggers

www.azwater.gov

Arizona's long-term drought status is moderate in a large portion of the state. Conditions in the east-central and southeast regions are now severe. West-central Arizona is abnormally dry while the north- and southwest regions are at normal drought status.

Reservoir Storage Assessment

Arizona reservoir levels for February 2006 as a percent of capacity. The map also depicts the average level and last year's storage for each reservoir, while the table also lists current and maximum storage levels.



Storage in most Arizona reservoirs has declined slightly since this time last month. The largest drop was on the Verde River system, which declined by 10 percent of capacity. The Salt River system in central Arizona and Lake Mead on the Colorado River both rose very slightly, by less than one percent of capacity. (Note that the cup that represents Show Low Lake in Figure 5 is colored gray because no data were reported at that site in February.) The Salt River system has declined by 4 percent of capacity since a year ago, but remains well above its average level. Compared to this time last year, the Verde River system and the San Carlos reservoir have declined by 56 percent and 24 percent of capacity, respectively, and are now below long-term average levels. The two large reservoirs on the Colorado River, Lake Powell and Lake Mead, remain below average levels due to long-term precipitation deficits in the Upper Colorado River Basin, even though Lake Powell has risen by 10 percent of capacity relative to last year.

Climate Assessment

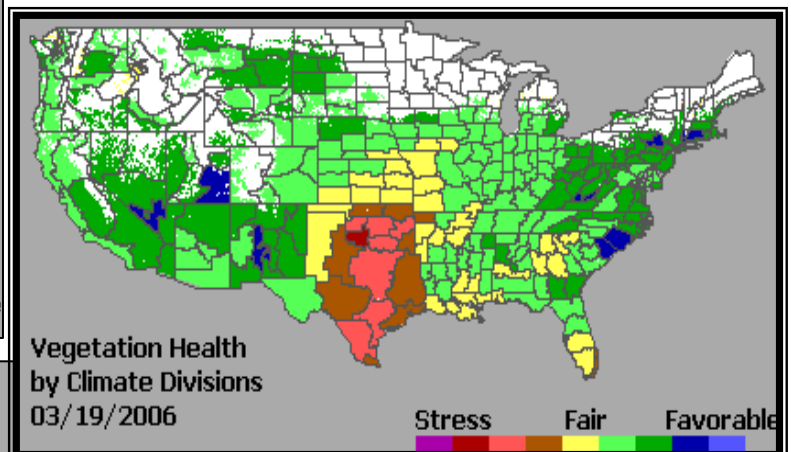
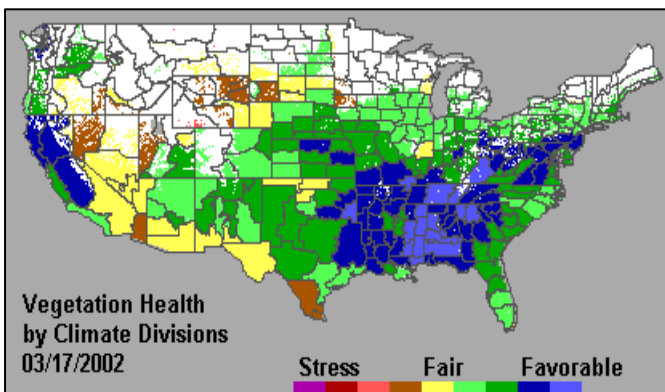
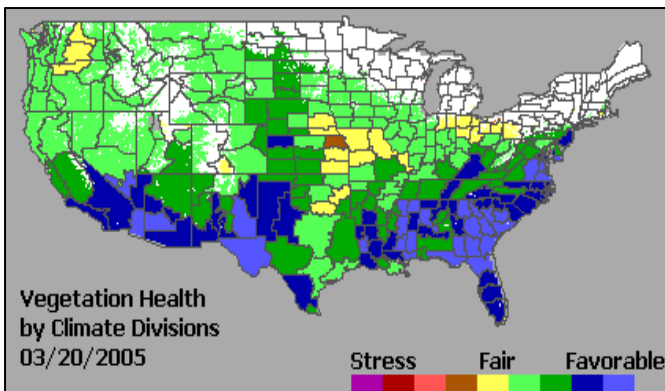
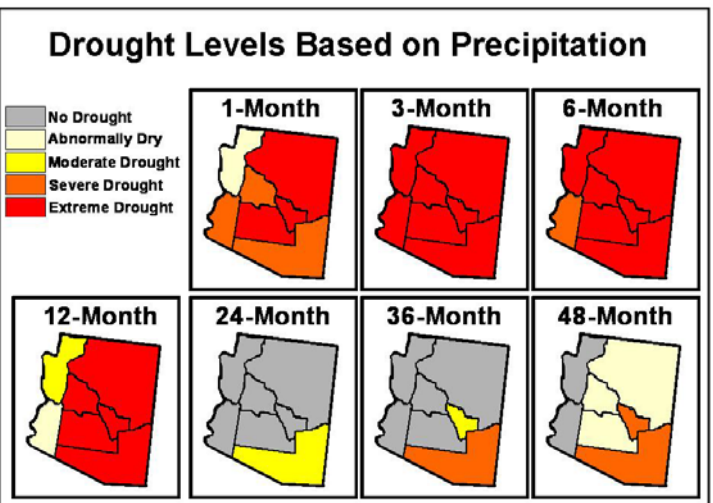
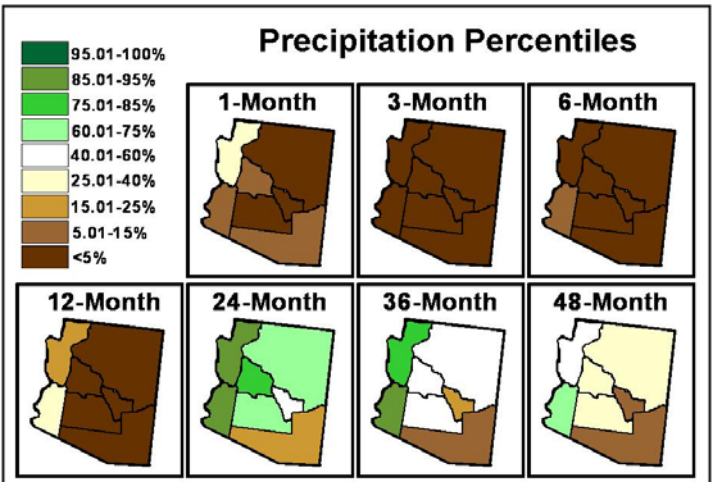
Temperature & Precipitation

The recent warm and extremely dry conditions continued across the entire state of Arizona during February 2006. Precipitation totals for recent months are extremely low, with the entire state characterized by amounts indicative of “severe” to “extreme” short-term drought over the past 1 to 6 months. The Palmer Drought Severity Index (PDSI) indicates moist conditions only along the western edge of the state (Climate Divisions 1 and 5).

The past 12 months have been marked by dryness characteristic of “extreme drought” across 5 of the 7 Arizona Climate Divisions, and dryness or drought elsewhere. There is very little evidence of drought within the state when examining precipitation totals for the past 2 years; drought is evident only across southeastern Arizona (“moderate drought”) during the period. The 36-month precipitation totals were above average for 5 of the 7 climate divisions in Arizona; however, across southeastern Arizona the 3-year precipitation total is suggestive of “severe drought”, while that across east-central Arizona is indicative of “moderate drought” conditions.

The long-term problematic areas within the state are the east-central and southeastern regions, where 4-year precipitation totals are suggestive of “severe drought” conditions.

For full assessment, see *State Climate Update for Arizona – Conditions through November 2005*
www.public.asu.edu/~dellis/update.html.



Vegetation Status

March 2006 satellite-derived vegetation status (above) is considerably better than during 2002 (left), but considerably more stressed than March 2005 (above left).

www.orbit.nesdis.noaa.gov/smcd/emb/vci/usavhcd.html

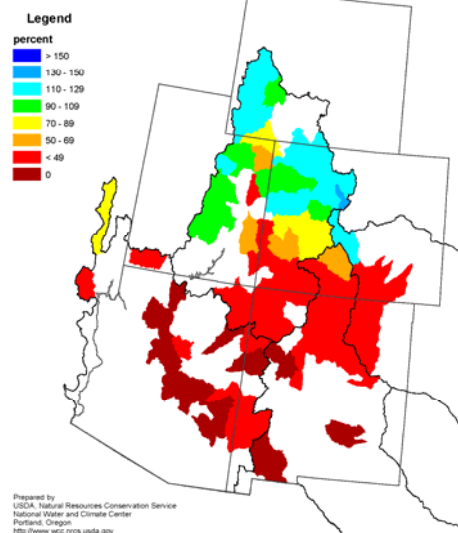
Streamflow/Runoff

Mountain Precipitation

Data from high elevation SNOTEL sites show that precipitation for February was 7 percent of average over the Salt River basin, 5 percent over the Verde River basin, and 13 percent of average over the San Francisco-Upper Gila River basin. The Little Colorado River basin received 3 percent of average precipitation in February.

Extremely low runoff is forecast this season for the Salt, Verde, San Francisco, Gila, and Little Colorado River basins as the result of record low snowpacks and lack of precipitation. The scarcity of winter storms in the Southwest is the primary reason for these dry conditions.

Colorado & Rio Grande Mountain Snowpack as of March 1, 2006



Watershed	Percent (%) of 30-Yr. Average	
	Snowpack as of March 1	Precipitation Oct. 1-Feb.
Salt River Basin	1%	21%
Verde River Basin	0%	17%
Little Colorado River Basin	1%	18%
San Francisco-Upper Gila River Basin	1%	29%
Central Mogollon Rim	0%	13%
Grand Canyon	0%	18%
Arizona Statewide	2%	--
Upper Colorado River Basin	93%	100%

Snowpack Amounts and Water Year Precipitation (Source USDA-NRCS)

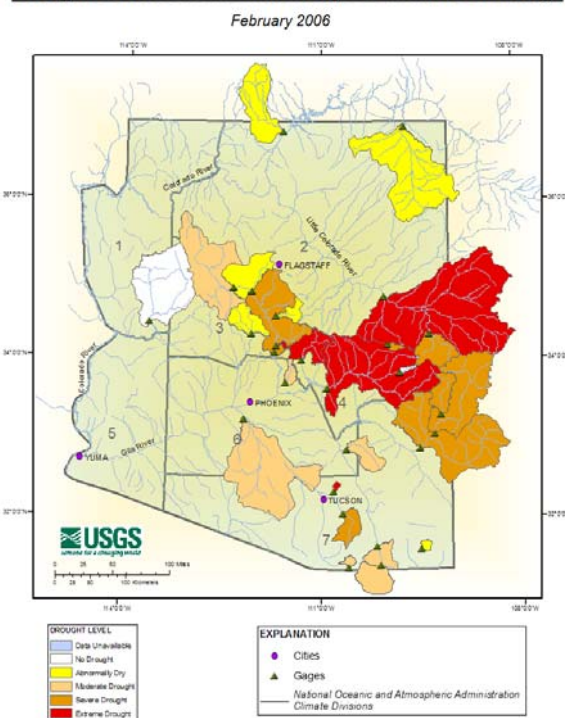
Runoff

Waterbody	February Runoff in Acre Feet	% of Median
Salt River near Roosevelt	9,030	21
Tonto Creek	640	4
Verde River at Horseshoe Dam	13,690	38
Combined Salt River Project reservoir system	23,360	21
Little Colorado River above Lyman Lake	200	40
Gila River to San Carlos reservoir	2,800	14
Colorado River inflow to Lake Powell	390,000	93% of the 30-yr. avg.

(Data provided by USDA-NRCS)

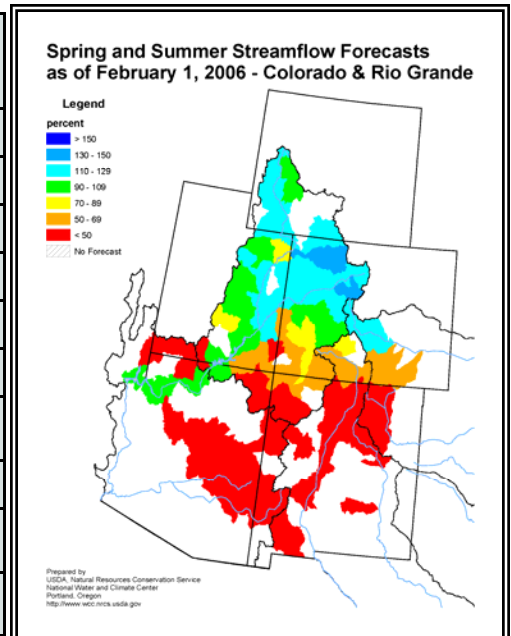
For more information, visit
az.water.usgs.gov/droughtmaps/droughtmaps.htm.

Drought Levels Based on Monthly Streamflow Discharge



Streamflow Forecasts

Waterbody	Forecasted Runoff (Feb – May unless noted) in Acre Feet	% of Median
Salt River near Roosevelt	50,000	14
Tonto Creek	4,000	8
Verde River at Horseshoe Dam	55,000	28
San Francisco River at Clifton	13,700	23
Gila River near Soloman	34,000	24
San Carlos reservoir inflow	13,000	16
Little Colorado River above Lyman Lake	Feb-June - 1,200	17
Little Colorado River at Woodruff	220	8
Colorado River inflow to Lake Powell	Apr-July – 8.3 million	105% of 30-yr. avg.
Virgin River at Littlefield	Apr-July – 24,000	32% of 30-yr. avg.



(Data provided by USDA-NRCS)

DroughtWise

Drought conditions tend to draw attention to the importance of water conservation. However, saving water is something we should always practice to help maintain an abundant water supply. Water conservation is everyone's responsibility.

Tip of the Month

Save water by keeping a jug of water in the refrigerator instead of running the tap to get a cool drink.



Photos courtesy of Kelly Redmond, Western Regional Climate Center

Weather Outlook

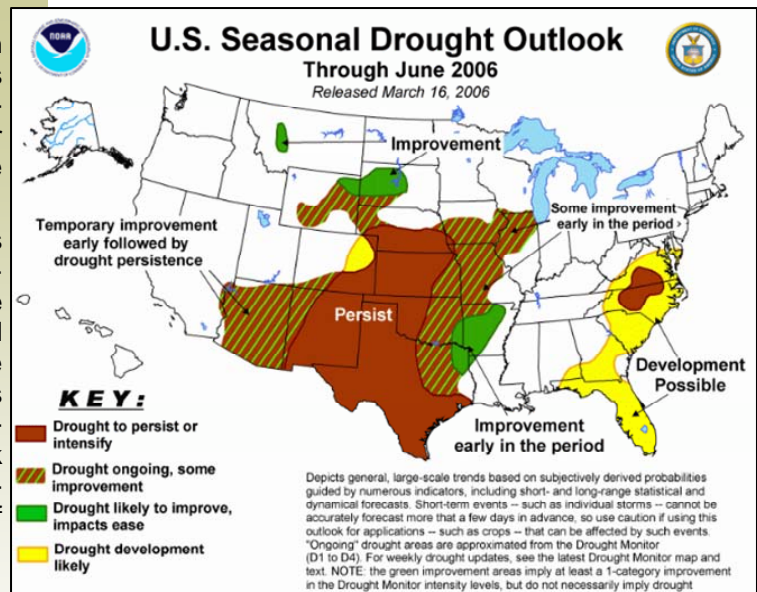
Climate & Drought Outlooks

The NOAA Climate Prediction Center (CPC) precipitation outlook for Arizona during April indicates equal chances for above average, average, and below average precipitation across the state. The CPC temperature outlook for April indicates modest confidence for above average temperatures statewide.

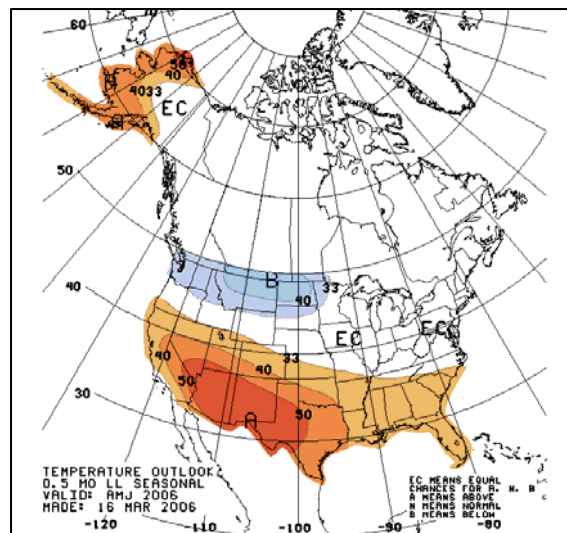
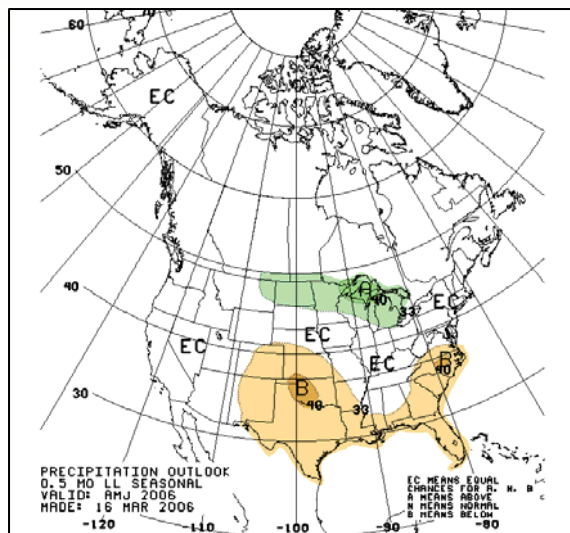
The CPC Seasonal Drought Outlook (below) indicates virtually all of Arizona will experience only temporary relief followed by a return to drought conditions by June 2006. The CPC outlook for the 90-day period, April through June 2006, indicates considerable confidence temperatures will be above average and equal chances for above average, average, and below average precipitation across the state. Worthy of note is CPC's outlook for the Arizona monsoon which indicates *some* confidence precipitation will be above average across much of the state.

Also see *Southwest Climate Outlook - February 2006*
www.ispe.arizona.edu/climas/forecasts/swoutlook.html.

For additional weather information from the Office of the State Climatologist for Arizona -
www.public.asu.edu/~dellis/azscweather.html.



Precipitation & Temperature Outlooks



NOAA's CPC Outlooks are 3-category forecasts. As a starting point, the 1971–2000 climate record is divided into 3 categories, each with a 33.3 percent chance of occurring (i.e., equal chances, EC). The forecast indicates the likelihood of one of the extremes—above-average (A) or below-average (B)—with a corresponding adjustment to the other extreme category; the “average” category is preserved at 33.3 likelihood, unless the forecast is very strong. Thus, using the NOAA-CPC temperature (precipitation) outlooks, areas with light brown (green) shading display a 33.3–39.9 percent chance of above-average, a 33.3 percent chance of average, and a 26.7–33.3 percent chance of below-average temperature (precipitation). A shade darker indicates a higher than 40.0 percent chance of above-average, a 33.3 percent chance of average, and a further reduced chance of below-average temperature, and so on. Equal Chances (EC) indicates areas with an equal likelihood of above-average, average, or below-average conditions; it is used by forecasters when the forecast tools do not indicate a strong “signal” conditions during a given period will be in any one of the three categories.

This report was based on the data and information through February 28, 2006. It does not reflect current conditions.